Science, Technology, Engineering, & Mathematics

Specifications for Recommended Tools and Equipment

The purpose of this document is to provide school districts a standard purchasing procedures document to use when installing or upgrading Technology Discovery Labs to Science, Technology, Engineering, & Mathematics labs. This document provides minimum specifications for equipment, software, furniture, etc. The recommended class size is **_24 students per class_**. The district will be responsible for maintaining all equipment, providing proper security, replacing missing equipment, and providing annual funds for operation of the program. The district is also responsible for providing site preparation and electrical wiring. Schools who wish to purchase items different from those in this specification document will require written permission from MDE.

Foreword

This document is a companion document to the 2006 Mississippi Curriculum Framework for Science, Technology, Engineering, & Mathematics. Included in this document are itemized equipment and minimum specifications.

A. Target Date: Fall 2009

B. Computer Systems and Peripherals
  1. Districts may exercise the option of having all items bid and installed in the specified configuration by a single vendor. All upgrades are to be installed and operational by the Target Date.
  2. Minimum specifications for computers and printers are based on the current Express Products List (EPL). Schools that choose to advertise for bids are encouraged to use the EPLs to compare prices and quality of equipment submitted on bids.
  3. Each EPL has a stated dollar spending limit per project. For instance, the Micro EPL and LAN EPLs each have a $100,000 per project limit. The Mississippi Department of Information Technology Services (ITS) has created a special ICT/STEM EPL that provides additional spending authority to exceed the EPL limits and helps secure quantity discounts from value-added vendors. Schools that choose to use the ICT/STEM EPL will need to follow the ICT/STEM EPL instructions.

C. Furniture
  1. It is recommended that the computer workstation tables, student tables, teacher workstations, media cabinet with lock, printer stands, bookcases, and filing cabinets be bid as a package supplied and installed by a single vendor. Bidders must coordinate with local school district personnel to develop a layout to show how the workstations will be placed in the laboratory to verify that adequate space exists. Printer stands, in some instances, may be available on the ICT/STEM EPL as an option to the chosen printer. This layout must be included with the bid. Unless otherwise stated, all items are to be delivered and operational by the Target Date. See Vendor Certification Statement for Furniture.
  2. It is recommended that task chairs be bid as a package supplied and installed by a single vendor. All chairs should be the same matching color which should coordinate with the workstations and table furnishings. Unless otherwise stated, all items are to be delivered and operational by the Target Date. See Vendor Certification Statement for Furniture.
  3. It is recommended that districts consider using furniture contracts from the Department of Finance and Administration, Office of Purchase and Travel (DFA-OPT) when possible for discounts as well as reduced time in bid solicitation. Vendors chosen must still sign the Vendor Certification form referenced above.

Equipment Specifications

A. Computer Systems and Peripherals: Information Technology Equipment - Bids
must include installation, setup, and training (to be scheduled by local district). Inside delivery, installation, and setup must take place by the Target Date. Bids must also include pre-loading the software described in Section C "Software," with the school providing the vendor media and proof of license.

Vendors must propose systems which are configured with all components provided by the base system manufacturer. If a component is not available from the base system manufacturer, the vendor may propose a compatible third party component only if described in their written proposal. Systems and peripherals must be fully configured prior to shipment.

If a warranted defect is found in an item, that item must be repaired or replaced on-site within five working days of notification. A toll-free or local telephone number with a 24 hour response time must be provided for troubleshooting purposes. In the event that a component must be returned to the manufacturer for warranted repairs, a replacement will be provided by the vendor. Charges for shipping and handling of the component and its replacement must be borne by the vendor during the on-site warranty period. All warranty repairs made to the system during the warranty period must maintain full compatibility of the system with installed software. Any components found to be defective must be replaced with the same brand and model or its successor.

If the school district chooses not to use the ICT/STEM EPL, the Vendor Certification for IT Equipment and Software Statement must be signed by the bidder and returned with the bid.

Spec Item No.	Description	Qty.
1	**Student Computers** *Specifications:* • OS: Windows XP/Vista operating system (Districts may choose version but should be the Professional Edition.) • Processor: Intel Core 2 Duo, 2.0+ GHz microprocessor (latest available recommended) • RAM: System unit with 2 GB RAM expandable to 4 GB RAM on the motherboard. • HDD: One 80 GB (formatted) SATA hard disk drive. • Ports: 6 USB 2.0 ports (front and back availability) 1 Firewire (IEEE 1394) • Optional ports: One parallel port and one serial port • Monitor: 17" LCD color monitor supporting resolutions up to 1280 x 1024, height adjustable. • Graphics: ATI or NVIDIA chipsets to support minimum 1280 x 1024 native resolution with minimum 128 MB RAM installed and DVI and/or VGA outputs (to be compatible with selected monitor). Graphics cards should be SolidWorks compatible. • Optical Mouse: Two-button with scrolling wheel high-resolution mouse with mouse pad. • Keyboard: Heavy-duty 104-key Windows keyboard. • Optical Drive: 16x Double-Layer Multi-Format DVD±/R±RW/CD-R/RW. • Sound card: 16 bit soundcard or integrated (100% SoundBlaster™ compatible), with headphone jacks (standard stereo with volume control) located on front of machine. Speakers are not required for these systems. If external speakers are chosen, they should be USB-powered and also incorporate a headphone jack. • NIC: PCI-bus 10/100/1000 network interface card, with RJ45 connector, with software driver. (OEM cards supplied by enterprise system manufacturer or integrated on the motherboard are acceptable.) • Integrated 9-in-1 media card reader Three year warranty provided by vendor to include parts and labor (1st year on-site). Warranty must include: system, monitor, keyboard, and mouse/pointing device, regardless of manufacturer or manufacturer's warranty. The *keyboard* and *mouse* are considered plug-and-play items. Therefore Vendor **may opt to exchange** the keyboard and mouse in lieu of coming on-site, with Vendor paying shipping **both to and from** the manufacturer or repair facility. Should the Vendor choose not to provide on-site service,	24

	the replacement keyboard or mouse should be shipped first, with instructions for the customer to return the damaged keyboard or mouse in the same box.	
2	**Teacher Portable Computer with Port Replicator/Docking Station** *Specifications:* - OS: Windows XP/Vista operating system (Districts may choose version but should be the Professional Edition.) - Processor: Intel Core 2 Duo, 2.0+ GHz microprocessor (latest available recommended). - RAM: 2 GB RAM. - Optical Drive: 8x Double-Layer Multi-Format DVD±/R±RW/CD-R/RW. - Sound card: 16 bit soundcard or integrated (100% SoundBlaster™ compatible), with headphone jacks (standard stereo with volume control) and integrated microphone. - HDD: 100 GB hard drive. - Ports: 1 DVI or VGA port, 2 USB 2.0 ports, 1 Firewire (IEEE 1394) - Optional ports: One parallel port and one serial port 9-in-1 media card reader either integrated or as peripheral - Display: TFT active matrix color display, 15.4" (widescreen) diagonal (1280 x 800 SVGA). - Graphics: Local bus video card with 256 MB RAM and graphics accelerator. - Two External Speakers: 5-1 speaker/subwoofer system, 65 watts, with external power supply. - NIC: 10/100/1000 card - Wireless NIC: 802.11b/g card - Modem: Integrated modem acceptable. - Wireless Optical Mouse: Two-button with scrolling wheel high-resolution mouse with mouse pad. - Wireless keyboard: 104-key Windows keyboard. - Built-in pointing device (touchpad, track ball, or stick). - Battery with AC adapter. - Extra battery. - Laptop carrying case. - Port Replicator/ Docking Station: must include USB ports, 10/100/1000 network port, and monitor connection. - Monitor: 17" LCD color monitor supporting resolutions up to 1280 x 1024, height adjustable. Three year warranty provided by vendor with parts and labor and accidental damage coverage. Accidental damage coverage must cover the portable computer and all internal components, except the battery.	**1**
3	**Networked Color Laser Printer** *Specifications:* - Network ready with additional USB 2.0 interface 400 MHz processor - Includes one set of toner cartridges: First start-up + additional full replacement cartridge - Minimum of one 500-sheet paper tray - Fully "plug-and-play" compatible with Windows XP Pro or Vista - Print speed: 25 ppm black, 25 ppm color - Print quality: 600 x 600 dpi Three year, on-site warranty provided by vendor.	**1**
4	**Networked Black and White Laser Printer** *Specifications:* - Network ready with additional USB 2.0 interface 400 MHz processor - Includes one set of toner cartridges: First start-up + additional full replacement cartridge - Minimum of one 500-sheet paper tray - Fully "plug-and-play" compatible with Windows XP Pro or Vista - Print speed: 30 ppm black - Print quality: 600 x 600 dpi Three year, on-site warranty provided by vendor.	**1**

5	**File Server** *Specifications:* • Two socket server each socket populated with dual core Intel Xeon processors • 2 160 GB formatted hot swappable SAS or SATA hard drives, mirrored (level 1 RAID), minimum 10K RPM • 4 GB RAM expandable to 16GB RAM on the motherboard • 2 hot swappable hard drive bays available after the installation of the base hard drivers and optical drive • 2 10/100/1000 NICs • CD-RW/DVD drive • Keyboard, mouse • 15-inch LCD monitor ***NOTE: This server is for a 3-lab school. Make adjustments based on the number of labs connecting to the server.*** Three year, on-site warranty provided by vendor.	1
6	**Backup Solution for Server** *Specifications:* • Recommend LTO Tape Drive, minimum 100GB/200GB for a single server lab. If the backup solution is for multiple servers, make adjustment for the size and type of backup solution needed. Example, tape library/auto loader or external hard drive with capacity at least twice that of the server(s). Three year warranty provided by vendor.	1
7	**UPS** *Specifications:* • Must be sized to support the file server Three year warranty provided by vendor.	1
8	**Network connectivity (Cat 5e or better cabling or 802.11g or n wireless)** *Specifications:* • Install Cat 5e or Cat 6 or upgrade existing Cat 5 cabling to Cat 5e or 6 (includes pulling, terminating, and testing/certification) • All cabling plant and equipment needed for functioning lab. • Wireless access points capable of minimum of 54 Mbps • Wireless NIC's by same manufacturer of access points/router ***NOTE: Districts who install a wireless lab must gain permission from the MDE. Contact Christy Todd at ctodd@mde.k12.ms.us*** Two year parts and labor warranty provided by vendor.	1
9	**Patch Panel and Cat 5e or 6 Patch Cables to match cabling type (only if using wired connectivity)** *Specifications:* • One 48-port patch panel per lab • 30 patch cables long enough to connect computers to a wall jack (7-10 ft) • 30 short patch cables for patch panel (3 ft) Two year parts and labor warranty provided by vendor.	30
10	**48-port 10/100 BaseT managed Switch with Gigabit Capability** *Specifications:* • 48 RJ-45 ports for 10BASE-T/100BASE-TX with a minimum of 2 additional ports with gigabit capability. Gigabit ports may or may not be populated, depending upon the needs of the school. • Supports half duplex and full duplex modes auto-negotiation for all ports. • Auto MDI/MDI-X support on all ports for easy cable detection • Efficient MAC Address learning engine supports up to 4K MAC Addresses • Provides store-and-forward forwarding scheme.	1

	• Must be standard width and include mounting kit for installation rack ***NOTE: If using a wireless network, wired switch(es) would be shared among labs according to the district's needs.*** Two year parts and labor limited warranty provided by vendor.	
11	**Rack (or use existing rack)** *Specifications:* • Industry standard 19" free standing open frame aluminum equipment rack • Approximately 72" tall • Secured to the classroom/laboratory floor with anchor bolts and to the wall • All active network components, including switch(es), server, monitor with keyboard, and the UPS must be properly mounted in the rack and all associated wiring must be properly dressed to meet all building and telecommunications codes • No equipment should be located on the rack any closer than 8" from the floor to avoid dust and dirt intake through the fan and air vents located on any piece of equipment One-year warranty parts and labor provided by vendor.	1
12	**Surge Protector** *Specifications:* • Six 120v electrical outlets with 6' cord. • Electrical rating - 15 amp, 120Vac, 50/60 Hz, continuous duty, three line protection, 15 amp circuit breaker • Minimum energy dissipation - 900 joules. • UL 1449 TVSS Rating - 330v across all three lines. • Clamping Response - <1 ns. • Noise Suppression - >60-90 dB or UL 1283 approved. • Agency Approvals - UL 1449 TVSS, UL 1283 EMI filter, CSA. Lifetime product warranty by manufacturer.	12
13	**Interactive board** *Specifications:* • Interactive board, mount, installation, and a minimum of two hours of training • Minimum 60" diagonal (72" or above diagonal recommended) • Speakers • Wireless slate or tablet to control the interactive board, PC, and projector Two year parts and labor warranty provided by vendor.	1
14	**LCD Projector with installation of ceiling mount** *Specifications:* • Resolution: 1024 x 768 • Brightness: 2600 ANSI lumens or • "Short Throw" Projector • Resolution: 1024 x 768 • Brightness: 1500 ANSI lumens • Optional distribution amplifier for longer distances or choose a wireless projector with a wireless network Ceiling mount projectors must be properly installed with all cords and wiring neatly embedded in ceiling or wall conduit. Two year parts and labor warranty, with the exception of the lamp, provided by vendor. If the lamp warranty is less than two years, vendor must provide a description of the lamp warranty.	1
15	**Wireless Presentation Remote** *Specifications:* • Control presentations 25- 50 feet away • Laser pointer • USB connection	1

	• Requirement may be satisfied if remote is included with projector or interactive board	

B. Other Equipment

Spec Item No.	Description	Qty.
16	**Digital Camera** *Specifications:* • 6 megapixel sensor captures 2,816 X 2,112 images for prints at sizes up to 8 X 10. • LCD image view finder. • Autofocus lens with 4x optical zoom. • Stores images on memory stick or SD card (included). • Connects with PCs via USB port and/or Firewire (IEEE 1394). • Includes flash, rechargeable battery, and AC adapter/charger. • Includes bundled software for editing and printing pictures. • Compatible with Windows operating systems	6
17	**Headphones** *Specifications:* • District may choose to purchase lab sets of hard-plastic, over-the-head headphones or individual student earbuds/disposable headphones • Must include extension cord if sound card jack is on back of computer. • Include a "Y" adapter to provide for 2 headphones connected to one computer.	25
18	**Voting system (set of 25 devices)** *Specifications:* • Microsoft Integration • Must be able to organize student response data at the individual student and class level • Create and display question slides with mathematical equations • Track points by student or team. Display competitive standings through dynamic scoreboards • Create and display video content on question slide • Automatically generate PowerPoint presentations from existing quizzes, tests, and study guides created in MS Word	1
19	**Digital Video Camera With Tripod** *Specifications:* • 35x Optical Zoom • 1000 x Digital Zoom • 2.7" LCD • MiniDV Digital Camcorder • Tripod • Firewire cable • Includes tape or memory card	1
20	**Graphing Calculator** *Specifications:* • TI-Nspire • Includes one year limited warranty	5
21	**LEGO Mindstorms Education NXT Robotics Kits (Product ID: W991288)** *Specifications:* • LEGO Mindstorms Education Base Set (12 sets included in Getting Started package) • LEGO Mindstorms Education Software and Site License • NXT Robotics Engineering I: Introduction to Mobile Robotics • NXT Robotics Engineering II: Guided Research Curriculum	1

C. Software –. All software must include 1 teacher license and at least 24 student licenses. However, more cost effective licenses, such as site licenses, are recommended.

Revision Date 3/13/09

School Districts are responsible for purchasing licenses (through state contracts, quotations, bids, or sole source) and furnishing their computer hardware vendors with proof of license or media. The computer hardware vendor will install the software on the server or clients as appropriate as part of their quoted hardware price.

Software must include, at a minimum, a 90 day warranty.

Spec Item No	Description	Qty.
22	**Office Productivity Software: Microsoft Office 2007** License type: Academic License Edition: Microsoft Office Professional Includes: • Microsoft Word • Microsoft Excel • Microsoft PowerPoint • Microsoft Publisher • Microsoft Access • Microsoft Outlook	25
23	**Concept Mapping Software: Inspiration** License type: Academic Edition: Latest Edition	25
24	**Symantec Ghost Solution Suite, SID Utility** License type: Academic Edition: Latest Edition	25
25	**Lab/Student Workstation Security Rollback Software (Examples are Deep Freeze, Clean Slate, etc.)** License type: Academic Software must: • protect public access computers from malicious or inexperienced users while not restricting users' activities • restores the computer to its original configuration discarding unwanted user changes: including erased files, installed software, downloaded spyware and adware, downloaded viruses and Trojan horses, and altered icons	25
26	**Lab/Student Management Software (Examples are NetOp, SynchronEyes, Vision, SchoolVue, Faronics Insight, etc.)** License type: Academic Software must**:** • Allow teachers to view students as a list for a quick view of who's present. • Create a virtual seating plan using your own classroom-layout. Backgrounds can be saved individually for each class. • View all students' screens as thumbnails. Double-click to initiate a remote control session. Sort the thumbnails alphabetically in ascending or descending order. • Create and manage recordings of the teacher's screen or recordings of students' screens. • Create and manage online tests and test results. • Follow and manage students' use of applications and website in real-time. Close, deny or hide elements on-the-fly. View, save or print history list of used applications and sites. • Prepare and manage groups for your classes in a tree-view of students. From this view you can send a message to students listed as available and invite them to join the class. • Allow or deny the use of certain applications on students' computers. • Allow or deny access to certain web sites and URL's from students' computers. • Notify students of the contents of an applied policy, i.e. which applications or websites are allowed or not. • Grab and save screen images during a monitor or remote control session • Make recordings of activity on the Teacher's screen. Add microphone sound and distribute to students for local replay or demonstrate pre-recorded instructions. Record also students' screens during a monitor or remote control session.	25

27	**Antivirus Software** License Type: Academic Anti-virus, Adware, and Spyware blocking software/solution(s) must be included either with purchase of system or by existing district software licenses.	**25**
28	**Server Operating System Software** - Operating System – Windows 2003, Novell Netware, Linux (District decision based upon existing environment and district technology staff's expertise) 1 license per server and appropriate number of CALs	**1**
29	**Backup Solution Software** - Backup solution software that provides advanced device and media management. 1 license per backup solution	**1**
30	**2D/3D Design Software: Solid Works** License type: Academic License Edition: Latest Edition Included teacher resources and courseware	**25**
31	**Website Creation Software: Adobe Creative Suite 4** Web Premium bundle to include: (Web Premium Site License Recommended) - Adobe Dreamweaver - Adobe Flash Professional - Adobe Photoshop Extended - Adobe Illustrator - Adobe Fireworks - Adobe Acrobat 8 Professional - Adobe Contribute	**25**
32	**TI-Nspire Software** License type: Academic License Edition: Latest Edition The TI-Nspire software runs on the desktop and simulates the same functionality of the TI-Nspire graphing calculators.	**25**
33	**GoVenture Software** License type: Academic License Edition: Latest Edition - GoVenture Entrepreneur - GoVenture Stock Market - GoVenture Financial Literacy - GoVenture Personal Finance	**25**

D. Furniture - Bids must include inside delivery, installation, and setup. Inside delivery, installation, and setup must take place by the Target Date. The Vendor Certification Statement must be signed by the bidder and returned with the bid.

Spec Item No	Description	Qty.
34	**Student Computer Workstation** *Specifications:* - Modular free-standing workstation. - All must be steel-reinforced, scratch and chip resistant. - Top: Solid core fiberboard w/high pressure laminate top and thick bumper edge molding with rounded edges and corners, grommet holes for cables. - Telescoping steel legs with leveling guides. - Suggested Dimensions: - Adjustable height from 23" to a maximum of 32" or as needed for lab size. - Dimensions of 30"d X and 36"w or as needed for lab size. - Includes wire CPU tower holder to be mounted under the workstation (8½"w X 20"d X 21"h) or as needed for lab size.	**24**

35	**Teacher Computer Workstation**
	Specifications:
	• Modular free-standing workstation.
	• Must be steel-reinforced, scratch and chip resistant.
	• Top: Solid core fiberboard w/high pressure laminate top and thick bumper edge molding with rounded edges and corners, grommet holes for cables.
	• Telescoping steel legs with leveling guides.
	• Suggested Dimensions:
	   o Adjustable height from 24" to a maximum of 36" or as needed for lab size.
	   o Dimensions of 30"d X and 72"w or as needed for lab size.
	   o Includes Mobile Box/Box/File Drawer Pedestal (19"d X 16"w X 27"h) or as needed for lab size.
		1

36	**Printer Stands** *Specifications:* • Modular free-standing stand to match construction of student workstations. • Must be steel-reinforced, scratch and chip resistant. • Top: Solid core fiberboard w/high pressure laminate top and thick bumper edge molding with rounded edges and corners. • Suggested Dimensions: 24"d x 27"w. • To include Steel Book Box 18"w x 15"d x 3.5"h. • Printer stand sized and recommended by printer manufacturer acceptable**.** • Printer stands may be purchased from furniture vendor or ICT/STEM EPL vendor.	2
37	**Chairs** *Specifications:* • Adjustable pneumatic lift chairs with carpet or soft-tread casters appropriate for lab flooring. • 5-point base with swivel seat and fixed back. • Color: Dark coordinating color to match the computer workstations. • Seat and back to be thick solid molded plastic or composite surface. • Minimum dimensions: adjustable height – 15"-20."	25
38	**Multimedia Cabinet with Lock** *Specifications:* • Metal or hard sturdy plastic • Lockable • Large enough to fit graphing calculators, digital cameras, digital video cameras, and robotics kits,	1
39	**Bookcase (Optional)** *Specifications:* • As requested by school district	1
40	**Filing Cabinet (Optional)** *Specifications:* • As requested by school district	1
41	**Student Work Tables (Optional)** *Specifications:* • As requested by school district	**Maximum of 4**

Performance Bond

A performance bond is not required if items are purchased from the Mississippi Department of Information Technology Services Express Products List (EPL) or Department of Finance and Administration state furniture contracts.

PERFORMANCE BOND OR OTHER SURETY

To secure the vendor's performance, the vendor shall procure, and maintain in effect at all times during the course of the three year warranty, a performance bond or other surety equal to the total cost of the system items provided. Evidence of bonding ability must be submitted to the district with the bid or quote. The actual bond or other surety must be presented to the school district at the time the purchase order is issued. Performance bonds shall be accompanied by a duly authenticated or certified document evidencing that the person executing the bond is a licensed Mississippi agent for the bonding company. This certified document shall identify the name and address of the person or entity holding the performance bond, and shall identify a contact person to be notified in the event the local school district is required to take action against the bond. The term of the performance bond shall be concurrent with the term of the warranty and shall not be released by the vendor until the warranty expires. The performance bond shall be procured at the vendor's expense and be payable to the local school district. Prior to the approval of the performance bond, the local school district reserves the right to review the bond and require the vendor to substitute an acceptable bond in such form as the local school district may reasonably require. The premiums on such bond shall be paid by the vendor. The bond must specifically refer to this warranty statement and shall bind the surety to all terms and conditions of this statement. The performance bond is exclusive of any national warranty or service contract.

Vendor Certification Statement for IT Equipment and Software

This Certification Statement is not required if items are purchased using the ITS ICT/STEM EPL.

All computer hardware must be "new" and received in original shipping containers from the manufacturer. Units which have been previously used, have served as demonstration units, or have been refurbished are not acceptable.

All software to be installed on the systems is to be legally licensed to the school district and a master copy of the software with printed documentation is to be left with designated school district personnel. If a site license is used to install a software package to more than one computer, the original copy of the site license with software masters and documentation is to be provided to the district.

Installation, setup, and training are to be scheduled by the school district. Installation and set-up of equipment includes uncrating, setting up, and connecting equipment to the network and ensuring that all the proposed equipment and software is fully operational, according to the specifications, and performs properly. The teacher notebook computer will be set up with port replicator on the Teacher Computer Table. The vendor will provide the instructor with initial training in setting up, docking and undocking the computer from the docking station, and connecting peripherals.

Authorization is hereby granted to the purchaser to make certain hardware and software configuration changes to allow the computer to operate the other compatible software and peripherals. These changes must be in accordance to industry accepted practices. Such changes will not invalidate the warranty protection.
I certify that I have read, understood, and accept the terms and conditions stated in the Science, Technology, Engineering, & Mathematics specifications. I further certify that all items listed on the bid or quote meet or exceed the minimum specifications as published by the local school district.

_____   _____
Vendor Signature   Date

This statement must be signed and attached to the bid or quote. If multiple vendors are supplying IT equipment and software, each vendor must certify their product(s) meet specifications.

Revision Date 3/13/09

Vendor Certification Statement for Furniture

The following statement must be attached or included on the quote or bid for furniture:

> **I certify that I have read the specifications and conditions outlined for furniture for the Science, Technology, Engineering, & Mathematics program and that the items described on this bid meet or exceed the state specifications.**

_____   _____
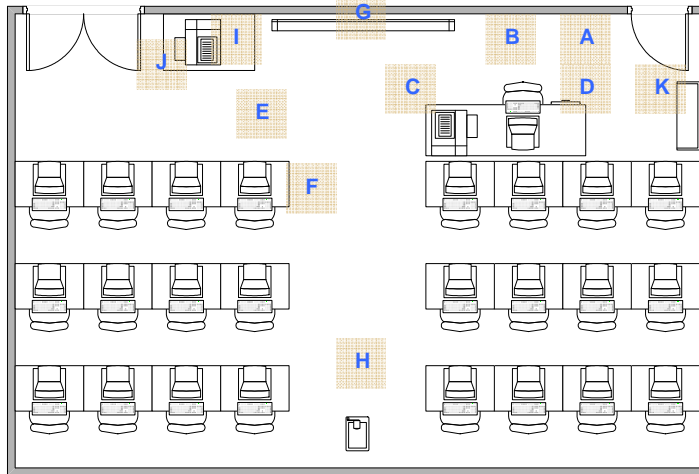
**Vendor Signature**   **Date**

This statement must be signed and attached to the bid or quote. If multiple vendors are supplying furniture, each vendor must certify their product(s) meet specifications.
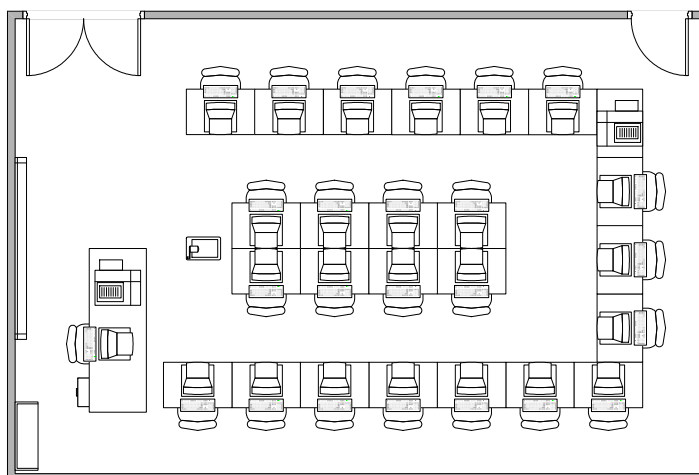
Appendix A: Sample Lab Layouts

Teacher Workstation		
A	Workstation Desk with Printer Stand	1
B	Task Chair	1
C	Black and White Printer (networked)	1
D	Filing Cabinet (optional)	1
Student Workstation		
E	Workstation Desk	24
F	Task Chair	24
General Items		
G	Screen	1
H	Projector	1
I	Color Printer (networked)	1
J	Printer Stand	1
K	Bookcase (optional)	1
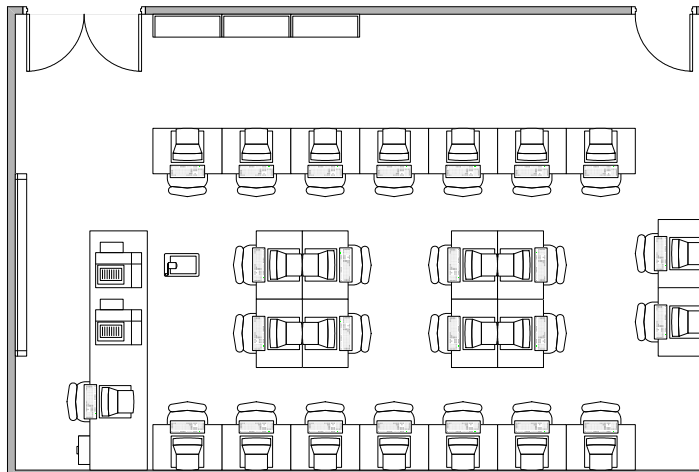
Teacher Workstation	
Workstation Desk with Printer Stand	1
Task Chair	1
Black and White Printer (networked)	1
Color Printer (networked)	1
Filing Cabinet (optional)	1
Student Workstation	
Workstation Desk	24
Task Chair	24
General Items	
Screen	1
Projector	1
Printer Stand	1
Bookcase (optional)	3

Teacher Workstation	
Workstation Desk with Printer Stand	1
Task Chair	1
Black and White Printer (networked)	1
Filing Cabinet (optional)	1
Student Workstation	
Workstation Desk	24
Task Chair	24
Color Printer (networked)	1
Printer Stand	1
General Items	
Screen	1
Projector	1
Bookcase (optional)	1

Appendix B: Layout Worksheet

Revision Date 3/13/09
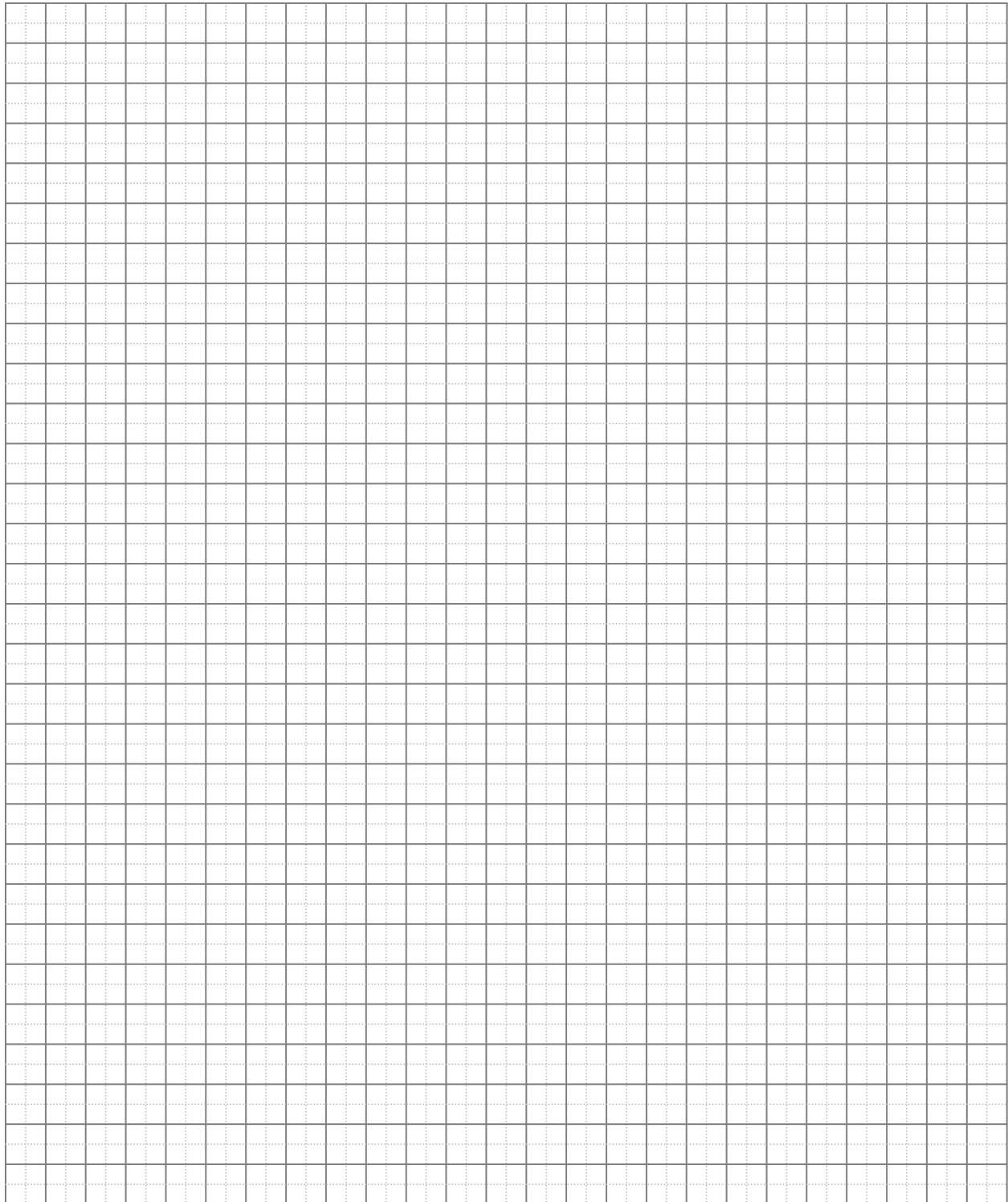
Appendix C: Equipment Worksheet

School District Name:

Vendor: Number of STEM Labs:

Spec Item #	Description	Cost	Quantity	Number of Labs *	Extended Total	Not Needed**
	STEM					
1	Student Computers		24			
2	Teacher Notebooks		1			
3	Color Laser Printer		1			
4	Black & White Laser Printer		1			
5	Server		1			
6	Backup Solution		1			
7	UPS		1			
8	Network Connectivity		1			
9	Patch Panel and Patch Cables		30			
10	48-port Switch		1			
11	Rack		1			
12	Surge Protector		12			
13	Interactive Board		1			
14	LCD Projector		1			
15	Wireless Presentation Remote		1			
16	Digital Camera		6			
17	Headphones		25			
18	Voting System		1			
19	Digital Video Camera		1			
20	Graphing Calculator		5			
21	Robotics Kits		1			
22	Office 2007		25			
23	Inspiration		25			
24	Symantec Ghost		25			
25	Lab/Student Security Rollback Software		25			
26	Lab/Student Mgt Software		25			
27	Antivirus Software		25			
28	Server OS Software		1			
29	Backup Solution Software		1			
30	Solid Works		25			
31	Adobe Creative Suite 4		25			
32	TI-Nspire Software		25			
33	GoVenture Software		25			
34	Furniture - Student Workstations		24			
35	Furniture - Teacher Workstations		1			
36	Furniture - Printer Stands		2			
37	Furniture - Chairs		25			
38	Furniture - Multimedia Cabinet		1			
39	Furniture - Bookcase		1			
40	Furniture - Filing Cabinet		1			
41	Furniture - Student Tables		4			
	GRAND TOTAL					

*Number of labs or number of items needed if shared among labs
**This item is not needed because the school district already has this item. Please provide additional detail in the comments section on the next page.

Comments: